APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/021,466	02/10/1998	TERRY LEE OEHRKE	1177	4500

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EXAMINER
KUPSTAS, TOD A

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 04/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.		Applicant(s)
Office Action Summary	09/021,466		OEHRKE ET AL.
	Examiner		**Art Unit**
	Tod Kupstas		2153

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _15 March 2002_ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _79-115_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _79-115_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _12_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Request for Continued Examination

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37

CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for

continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been

timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR

1.114. Applicant's submission filed on 3/15/2002 has been entered.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3.   Claims 79-80, 82-88, 91-95, 98, 104, 106, 18-114 are rejected under 35 U.S.C. 102(e) as

being anticipated by Bolosky et al. (US 5,699,503).

As set forth in claim 79, Bolosky discloses a scalable system for providing network

processing and stored data access, the (a) a server (18a, 18b, and 18c) operative to process user

requests (b) a switch operatively connected to the server (the system can switch between the

failed and operative information, this indicates a switch); (c) a data storage device (22A-22C, 24,

A-24 C); see col. 8, lines 13-51, operatively connected to the switch; and (d) wherein the server

operates independently of the data storage device and is connected to the data storage device via

the switch in a manner to permit the inclusion of an additional server to process other user

requests without the inclusion of an additional data storage device; (the system is highly

configurable and provides for multiple set-ups and provisions for when a storage device may drop

off-line, and providing for creating back-up subsystems and controllers); see col. 8, line 38-col. 9,

line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 80, Bolosky discloses a system wherein the server operates

independently of the data storage device and is connected to the data storage device via the

switch in a manner to permit the inclusion of an additional data storage device without the

inclusion of an additional server (in no way are servers and storage devices directly connected, if a

storage device drops off-line the server does not drop off-line, nor is there any direct correlation

between a required number of servers and storage devices, both are configurable based on an end

user's desires); see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-

28.

As set forth in claim 82, Bolosky discloses a scalable system fro providing network

processing and stored data access, the system comprising (a) at least first and second servers

(18a-18c) operative to process at least first and second user requests, respectively; (b) a switch

operatively connected to each of the servers (switches in the event of a system failure); (c) a

plurality of data storage devices (22 A-C, 24 A-C) operatively connected to the switch; and (d) wherein the server operates independently of the data storage devices and are connected to the data storage devices via the switch in a manner to permit the inclusion of an additional server to process at least an additional user request without the inclusion of an additional data storage device (the system is highly configurable and provides for multiple set-ups and provisions for when a storage device may drop off-line, and providing for creating back-up subsystems and controllers); see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 83, Bolosky discloses a system wherein the servers operate independently of the data storage devices and are connected tot he data storage devices via the switch in a manner to permit the inclusion of an additional data storage device without the inclusion of an additional server; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28..

As set forth in claim 84, Bolosky discloses a system wherein the servers operate independently of the data storage devices an are connected to the data storage devices via the switch in a manner to permit the removal of any one of the plurality of data storage devices without the removal of any of the servers; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 85, Bolosky discloses a system wherein the servers operate independently of the data storage devices and are connected to the data storage devices via the switch in a manner to permit the removal of any one of the servers without the removal of any of

the data storage devices; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 86, Bolosky discloses a system wherein each of the first and second servers applies an application, the application applied by the first server being substantially the same as the application applied by the second server such that, in the event of a failure of either of the first and second servers, any subsequent user requests will be processed by any other of the servers that are operable; (all elements of the system are mirrorable and configurable, even the controller is suggested to be backed-up; see col. 5, line 61-col. 6, line 24).

As set forth in claim 87, Bolosky discloses a system wherein each of the plurality of data storage devices stores data, the data stored by each of the plurality of data storage devices being substantially the same such that, in the event of a failure of any one of the plurality of data storage devices, the dat is accessible from any other of the plurality of data storage devices that are operable; (declustered mirroring; see col. 6, lines 56-65).

As set forth in claim 88, Bolosky discloses a system wherein each of the first and second servers applies an application, the application applied by the first server being substantially the same as the application applied by the second server such that, in the event of a failure of either of the first and second servers, any subsequent user requests will be processed by any other of the servers that are operable, and wherein each of the plurality of data storage devices stores data, the data stored by each of the plurality of data storage devices being substantially the same such that, in the event of a failure of any one of the plurality of data storage devices, the data is accessible

from any other of the plurality of data storage devices that are operable (the declustered mirroring

and the back-up data storage devices); see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line

23, and col. 7, lines 4-28.

As set forth in claim 91, Bolosky discloses a scalable system fro providing network

processing and stored data access, the system comprising: (a) at least first and second sets of

servers (more that one 10), each of the sets of servers comprising at least first and second servers

(18 a-c) operative to process at least first and second user requests, respectively, and wherein

each of the sets of servers applies a separate application (two different video on demand

programs); (b) a switch operatively connected to each of the servers within each of the sets of

servers (switch implied through the back up process); (c) a plurality of data storage devices (22A-

22C, and 24A-24 C) operatively connected to the switch; and (d) wherein the sets of servers

operate independently of the data storage devices and are connected to the data storage devices

via the switch in a manner to permit the inclusion of an additional server to any of the sets of

servers to process at least an additional user request without the inclusion of an additional storage

device see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 92, Bolosky discloses a system wherein the sets of servers operate

independently of the data storage devices and are connected to the data storage devices via the

switch in a manner to permit the inclusion of an additional data storage device without the

inclusion of an additional server to any of the sets of servers see col. 8, line 38-col. 9, line 34, col.

5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 93, Bolosky discloses a system wherein the sets of servers operate

independently of the data storage devices and are connected to the data storage devices via the

switch in a manner to permit the inclusion of an additional data storage device without the

removal of an additional server to any of the sets of servers see col. 8, line 38-col. 9, line 34, col.

5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 94, Bolosky discloses a system wherein the data stored by any one of

the plurality of data storage devices is associated with an application applied by any one of the

sets of servers (the striped video data).

As set forth in claim 95, Bolosky discloses a system wherein the sets of servers operate

independently of the data storage devices and are connected to the data storage devices via the

switch in a manner to permit the removal of any one of the servers from any one of the sets of

servers without the removal of any of the plurality of data storage devices; see col. 8, line 38-col.

9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 98, Bolosky discloses a survivable system for providing network

processing and stored data access, the system comprising: (a) at least first and second servers (18

a-c) operative to process at least first and second user requests, respectively, (b) a switch

operatively connected to each of the servers; (c) a plurality of data storage devices (22 A-C, 24

A-C) operatively connected to the switch (d) wherein each of the first and second servers applies

an application, the application applied by the first server being substantially the same as the

application applied by the second server (the declustered mirroring) such that, in the event of a

failure of either of the first and second servers, any subsequent user request will be processed by

any other of the servers that are operable; and (e) wherein each of the plurality of data storage

devices stores data, the data stored by each of the plurality of data storage devices being

substantially the same such that, in the even of a failure of any one of the plurality of data storage

devices, the data is accessible form any other of the plurality of data storage devices that are

operable; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 99, Bolosky discloses a system wherein the data stored by any one of

the plurality of data storage devices is associated with an application applied by any one of the

first and second servers (the striped video data).

As set forth in claim 103, Bolosky discloses a system wherein each of the first and second

servers applies an application, the application applied by the first server being substantially the

same as the application applied by the second server such that, in the event of a failure of either of

the first and second servers, any subsequent user requests will be processed by any other of the

servers that are operable, and wherein each of the plurality of data storage devices stores data, the

dat stored by each of the plurality of data storage devices being substantially the same such that,

in the even of a failure of any one of the plurality of data storage devices, the data is accessible

from any other of the plurality of data storage devices that are operable; see col. 8, line 38-col. 9,

line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 104, Bolosky discloses a method for providing network processing

and stored data access, the method comprising the steps of: (a) providing a server operative to

apply an application; (b) receiving a user request on the server; (c) applying the application to the

user request to generate a query; (d) providing a data storage device configured to store data; (e)

switching the query to the data storage device; (f) routing requested data from the data storage

device to the server in response to the query; and (g) providing an additional server without

providing an additional data storage device, or alternatively, providing an additional data storage

device without providing an additional server; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col.

6, line 23, and col. 7, lines 4-28.

As set forth in claim 106, Bolosky discloses a method for providing network processing

and stored data access, the method comprising the steps of: (a) providing at least first and second

servers (18a-18c) operative to apply first and second applications, respectively; (b) receiving first

and second user requests on the first and second servers, respectively; (c) applying the first and

second applications to the first and second user requests, respectively, to generate first and second

queries, respectively; (d) providing at least first and second data storage devices (22 A-C. 24A-

24C) configured to store first and second data, respectively; (e) switching the first and second

queries to the first and second data storage devices, respectively (f) routing first requested data

from the first data storage device tot he first server in response tot he first query, and routing

second requested data from the second data storage device to the second server in response to the

second query; and (g) providing an additional server without providing an additional data storage

device, or alternatively, providing an additional data storage device without providing an

additional server; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 108, Bolosky discloses a method wherein the first application is substantially the same as the second application (the video streaming data).

As set forth in claim 109, Bolosky discloses a method further comprising the steps of: (h) in the event of a failure of either of the first and second servers processing any subsequent user requests on any other of the servers that are operable; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 110, Bolosky discloses a method wherein the first data is substantially the same as the second data (the video streaming data).

As set forth in claim 111, Bolosky discloses a method further comprising the steps of: (h) in the event of a failure of either of the first and second data storage devices, providing any subsequent requested data from any other of the data storage devices that are operable; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

As set forth in claim 112, Bolosky discloses a method wherein the first application is substantially the same as the second application, and wherein the first data is substantially the same as the second data (the on-demand video data).

As set forth in claim 113, Bolosky discloses a method further comprising the steps of: (h) in the even of a failure of either of the first and second servers, processing subsequent request on any other of the servers that are operable; and) in the event of a failure of either of the first and

second data storage devices, providing any subsequent requested data from any other of the data

storage devices that are operable; see col. 8, line 38-col. 9, line 34, col. 5, line 61-col. 6, line 23,

and col. 7, lines 4-28.

As set forth in claim 114, Bolosky discloses a method for proving network processing and

stored data access, the method comprising the steps of: (a) providing at least first and second

servers operative to apply first and second applications, respectively, the first application being

substantially the same as the second application; (b) receiving first and second user requests on

the first and second servers, respectively; (c) applying the first and second applications tot he first

and second user requests, respectively, to generate first and second queries, respectively; (d)

providing at least first and second data storage devices configured to store first and second data,

respectively, the first data being substantially the same as the second data; (e) switching the first

and second queries to the first and second data storage devices, respectively; (f) routing first

requested data from the first data storage device to the first server in response to the first query,

and routing second requested data from the second data storage device to the second server in

response to the second query; (g) in the even of a failure of either of the first and second server,

processing any subsequent requests on any other of the servers that are operable; and (h) in the

event of a failure of either of the first and second data storage devices, providing any subsequent

requested data from any other of the data storage devices that are operable; see col. 8, line 38-col.

9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 81, 89, 96, 100, 105, 107, and 115 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bolosky et al. (US 5,699,503).

Official notice is taken regarding claims 4-9. Utilizing various application processes, such

as a mail application, a news application, a directory application, a content application, a

groupware application, or an Internet protocol (IP) service are old and notorious in the art. One

of ordinary skill in the art would have used any one of these applications in the system as taught

by Bolosky. The rationale is as follows: It would have been desirable to have used an application

that is used by multiple people. As any of the previously mentioned applications are utilized by

many in the field, it would have obvious to one of ordinary skill in the art to have utilized one of

these applications in the system as taught by Bolosky, thereby providing an application in the

system that is frequently used by end users.

6.   Claims 90, 97, 99, and 101-103, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bolosky et al. (US 5,699,503), in view of Peacock (US 4,914,570).

Bolosky does not disclose having a load balancer. Peacock discloses having a load

balancer in operation with multiple processors; see col. 12, lines 50-58. It would have been

obvious to a person of ordinary skill in the art at the time this invention was made to have

provided the system of Bolosky, with a load balancer, as taught by Peacock. The rationale is as

follows: It would have been desirable to have been able to efficiently process the information. As

Peacock teaches the desirability of using a load balancer, one of ordinary skill would have been

motivated by Peacock's teaching to have provided a load balancer to the system of Bolosky,

thereby having provided efficient means for processing the information, and preventing the

breakdown of the system.

As set forth in claim 102, Bolosky discloses a scalable system for providing network

processing and stored data access, the system comprising (a) at least first and second servers

(18a-18c) operative to process at least first and second user requests, respectively; (b) a switch

operatively connected to each of the servers; (c) a plurality of data storage devices (22A-22-C,

24A-24C) operatively connected to the switch; (e) wherein the servers operate independently of

the data storage devices and are connected to the data storage devices via the switch in a manner

to permit the inclusion of an additional server to process at least an additional user request

without the inclusion of an additional data storage device, to permit the inclusion of an additional

data storage device without the inclusion of an additional server, to permit the removal of any one

of the servers without the removal of any of the data storage devices, and to permit the removal

of any one of the data storage devices without the removal of any of the servers; see col. 8, line

38-col. 9, line 34, col. 5, line 61-col. 6, line 23, and col. 7, lines 4-28.

Response to Arguments

7.   Applicant's arguments filed 3/15/2002 have been fully considered but they are not

persuasive.

Applicant argues that the instant invention differs from Bolosky be being able to have the

storage devices and servers added and removed without adding and removing respective servers

or storage devices corresponding to the device removed. The Examiner contends that Bolosky is

fully scalable in the sense that the Applicant intends. The system is highly configurable and

provides for multiple set-ups and provisions for when a storage device may drop off-line, and

providing for creating back-up subsystems and controllers; see col. 8, line 38-col. 9, line 34, col.

5, line 61-col. 6, line 23, and col. 7, lines 4-28. In no way are the servers and storage devices

directly connected, if a storage device drops off-line the server does not drop off-line, nor is there

any direct correlation between a required number of servers and storage devices, both are

configurable based on an end user's desires. Applicant further suggests that Bolosky teaches

against full salability by having a microprocessor associated with a data storage device. The

Examiner disagrees noting that some data storage device must be accessed for the server to

function, and the degree of association present in Bolosky is no more than that present in the

Applicant's instant invention.

Applicant further argues that in Bolosky "each of the data storage devices do not store

<u>substantially the same data</u> in order to ensure survivability of the system. In fact, the "striping"

and "declustered mirroring" processes of Bolosky are designed such that each of the data storage

devices store <u>a different set of data</u> for survivability purposes." (Emphasis added by Applicant).

The Examiner disagrees noting that declustered mirroring is taking a copy of the data (which is

"substantially the same data") and spreading it across the data storage devices, twice, in the even

of a failure. Bolosky clearly meets this limitation.

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Tod Kupstas whose telephone number is (703) 305-2655.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess, can be reached at (703) 305-4792. The fax phone number for this

art unit is (703) 308-6743. Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the technology center receptionist whose

telephone number is (703) 305-3900.

Dung C. Dinh
Primary Examiner

Tod Kupstas
4/3/2002